

Modification of asphalt-free super viscous oil using ethylene copolymer with vinyl acetate

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Abstract

In this work the composition as well as the physical and mechanical properties of deasphalted bitumen of the Ashalchinsky field compounded by ethylene vinyl-acetate copolymer was studied. The possibility of development of an asphalt concrete pavement based on bituminous binding material, containing as dispersed phase, not asphaltene associates, but ethylene vinyl-acetate copolymer was looked into. The characteristics of the new asphalt binder are presented, on the basis of which it follows that the resulting binding material has ultra-high reserve of strength, elastic-deformation, low temperature and adhesion properties.

Keywords

Adhesion, Asphalt-free, Bitumen, Ethylene vinyl-acetate copolymer, Penetration, Softening temperature